NewsRelease

National Aeronautics and Space Administration

Langley Research Center Hampton, Virginia 23681-2199

Kimberly W. Land For Release: February 2, 2001

(757) 864-9885 RELEASE: 01-011

TUESDAY, FEBRUARY 6

W&M Professor to speak on Deep Sea Biology

Deep sea biologist, Cindy Lee Van Dover has research that proves life can exist without sunlight in the deep sea. Swarming with mysterious and extraordinary life, giant tubeworms, clams, "eyeless" shrimp and bacteria are proving the theory that geothermal light on the seafloor might sustain photosynthesis by bacteria.

Van Dover, an assistant biology professor at the College of William & Mary (W&M), will present "Photosynthesis in the Deep Sea without Sunlight? The Denouement!" at a colloquium at 2 p.m. Tuesday, Feb. 6, at NASA Langley's H.J.E. Reid Conference Center.

<u>Media Briefing:</u> A media briefing will be held at 1:15 p.m. at the H.J.E. Reid Conference Center, 14 Langley Blvd., at NASA Langley Research Center. Members of the media who wish to attend should contact Kimberly W. Land (757) 864-9885.

Van Dover will review the results of a deep sea search for photosynthetic organisms that took place during a July 2000 "Alvin" mission to hot springs off the coast of Oregon. Deep sea hot springs are found along cracks in the seafloor where spreading occurs. Van Dover will talk about how researchers discovered an unexpected abundance of bacteria in ocean surface waters, which account for as much as 10% of the surface productivity using long wavelength light.

Van Dover, who discovered a unique photoreceptor in a vent invertebrate, received her doctorate in 1989 from the Massachusetts Institute of Technology/Woods Hole Oceanographic Institution. In 1990, she qualified as pilot of the deep-diving submersible "Alvin" and was pilot-in-command of 48 dives.

Author of more than 50 articles, Van Dover was awarded the McCurdy Scholar at Duke University's Marine Laboratory and is the director of the West Coast National Undersea Research Center base at the University of Alaska, Fairbanks.

The public is invited to the Sigma Series lecture at the Virginia Air and Space Center that evening, at 7:30 p.m.